



## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of  
Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON  
CONTAINING FORMATION TO INCREASE A  
PERMEABILITY OF THE FORMATION

Application Number: 09/841000

Confirmation Number: 4713

First Named Applicant: Eric de Rouffignac

Attorney Docket Number: 5659-02400

Art Unit: 3672

Examiner: George A Suchfield

Search string: ( 4931171 or 4737267 or 4384948 or 3593790  
or 3497000 or 3244231 or 3223166 or 3947656  
or 3165154 or 4458757 ),pn.

**RECEIVED**

**SEP 11 2003**

**GROUP 3600**

### US Patent Documents

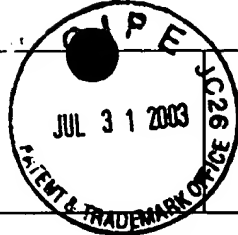
Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
GS	1	4931171	1990-06-05	Piotter			
	2	4737267	1988-04-12	Pao et al.			
	3	4384948	1983-05-24	Barger			
	4	3593790	1971-07-20	Herce			
	5	3497000	1970-02-24	Hujak et al.			
	6	3244231	1966-04-05	Grekel et al.			
	7	3223166	1965-12-14	Hunt et al.			
	8	3947656	1976-03-30	Lodi			
	9	3165154	1965-01-12	Santourian			
GS	10	4458757	1984-07-10	Bock et al.			

Signature

Examiner Name	Dat
George Suchfield	10/15/03

Form PTO-1449 (modified)  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement  
(Use several sheets if necessary)



ATTY. DKT. NO. 5659-024

APPLICANT: de Rouffignac et al.

FILING DATE: April 24, 2001

SERIAL NO. 09/841,000

GROUP: 3672

### U.S. PATENT DOCUMENTS

EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
GS	S5	2,857,002	10/21/1958	Pevere et al.			

### FOREIGN PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
GS	T01	1836876	12/30/1994	SU			Y

### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

GS	T02	Burnham, Alan, K. "Oil Shale Retorting Dependence of timing and composition on temperature and heating rate", January 27, 1995, (23 pages).
	T03	Burnham et al. "A Possible Mechanism of Alkene/Alkane Production in Oil Shale Retorting, (7 pages).
	T04	Campbell, et al., "Kinetics of oil generation from Colorado Oil Shale" IPC Business Press, Fuel, 1978, (3 pages).
	T05	Cummins et al. "Thermal Degradation of Green River Kerogen at 150° to 350 °C", Report of Investigations 7620, U.S. Government Printing Office, 1972, (pages 1-15).
	T06	Cook, et al. "The Composition of Green River Shale Oils", United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-23).
	T07	Hill et al., "The Characteristics of a Low Temperature in situ Shale Oil" American Institute of Mining, Metallurgical & Petroleum Engineers, 1967 (pages 75-90)..
	T08	Dinneen, et al. "Developments in Technology for Green River Oil Shale" United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-20).
	T09	De Rouffignac, E. "In Situ Resistive Heating of Oil Shale for Oil Production-A Summary of the Swedish Data, (4 pages).
	T10	Dougan, et al. "The Potential for in situ Retorting of Oil Shale in the Piceance Creek Basin of Northwestern Colorado", Quarterly of the Colorado School of Mines (pages 57-72).
	T11	Hill et al. "Direct Production of Low Pour Point High Gravity Shale Oil" I&EC Product Research and Development, 1967, Volume 6, (pages 52-59).
	T12	Yen et al., "Oil Shale" Developments in Petroleum Science, 5, Elsevier Scientific Publishing Co., 1976 (pages 187-198).
	T13	SSAB report, "A Brief Description of the Ljungstrom Method for Shale Oil Production," 1950, (12 pages).
	T14	Salomonsson G., SSAB report, "The Lungstrom In Situ-Method for Shale Oil Recovery, 1950 (28 pages)
	T15	"Swedish shale oil-Production method in Sweden," Organisation for European Economic Co-operation, 1952, (70 pages).
	T16	SSAB report, "Kvarn Torp" 1958, (36 pages).
	T17	SSAB report, "Kvarn Torp" 1951 (35 pages).
	T18	SSAB report, "Summary study of the shale oil works at Narkes Kvarntorp" (15 pages).
GS	T19	Vogel et al. "An Analog Computer for Studying Heat Transfrer during a Thermal Recovery Process," AIME Petroleum Transactions, 1955 (pages 205-212).
*	T20	<del>"SKIFEROLJA GENOM UPPVARMNING AV SKIFFERBERGET," Faxin Department och Namder, 1941, (3 pages)</del>

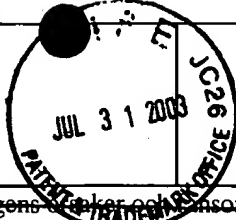
RECEIVED  
AUG 01 2003  
GROUP 3600

EXAMINER: George Suchfield

DATE CONSIDERED: 10/15/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified)  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement  
(Use several sheets if necessary)



ATTY. DKT. NO. 5659-02

SERIAL NO. 09/841,000

APPLICANT: de Rouffignac et al.

GROUP: 3672

FILING DATE: April 24, 2001

* T21	<del>"Aggregeringen av skiffer och oljesoneringar grunder", Av director E.F.Cederlund i Statens livsmedelskommission (1 page).</del>
* T22	<del>Ronby, E. "KVARNTORP-Sveriges Största skifferoljeindustri," 1943, (9 pages)</del>
GS T23	SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages).
T24	Gejrot et al., "The Shale Oil Industry in Sweden," Carlo Colombo Publishers-Rome, Proceedings of the Fourth World Petroleum Congress, 1955 (8 pages)
T25	Hedback, T. J., "The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional Meeting World Power Conference, 1957 (9 pages)
T26	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand", 1955 Vol. 1, (141 pages) English
T27	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Figures", 1955 Vol. 2, (146 pages) English.
T28	"Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: tests", 1955 Vol. 3, (256 pages) English.
T29	Helander, R.E., "Santa Cruz, California, Field Test of Carbon Steel Burner Casings for the Lins Method of Oil Recovery", 1959 (38 pages) English.
T30	Helander et al., Santa Cruz, California, Field Test of Fluidized Bed Burners for the Lins Method of Oil Recovery" 1959, (86 pages) English.
T31	SSAB report, "Bradford Residual Oil, Athabasa Ft. McMurray" 1951, (207 pages), partial translation.
GS T32	"Lins Burner Test Results-English" 1959-1960
* T33	<del>SSAB "Annual Reports, SSAB Laboratory, Address Annually Issues Shale and Ash, Oil, Gas, Waste Water, Analytical", 1953-1954, (166 pages). Swedish</del>
T34	<del>SSAB report, "Financial Matter, Swedish taxes, etc.," 1960-1961 (37 pages). Swedish</del>
T35	<del>SSAB report, "Cost For Mining," 1959-1979 (13 pages). Swedish</del>
T36	<del>SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production Alternatives", 1960, (64 pages). Swedish</del>
T37	<del>SSAB report, "Assessment of Future Mining Alternatives of Shale and Dolomite," 1962, (39 pages) Swedish</del>
* T38	<del>SSAB report, "Kartong 2 Shale: Ljungströmsanläggningen" (104 pages) Swedish</del>
GS T39	SAAB, "Photos", (18 pages).
* T40	<del>SAAB report, "Swedish Geological Survey Report, Plan to Delineate Oil shale Resource in Närke Area (near Kvarntorp)," 1941 (13 pages). Swedish</del>
T41	<del>SAAB report, "Recovery Efficiency," 1941, (61 pages). Swedish</del>
T42	<del>SAAB report, "Geologic Work Conducted to Assess Possibility of Expanding Shale Mining Area in Kvarntorp: Drilling Results, Seismic Results," 1942 (79 pages). Swedish</del>
T43	<del>SSAB report, "Ojematinigar vid Norrtorp," 1945 (141 pages)</del>
T44	<del>SSAB report, "Inhopplingschema, Norrtorp II 20/3-17/8", 1945 (50 pages). Swedish</del>
T45	<del>SSAB report, "Secondary Recovery after LINS," 1945 (78 pages)</del>
T46	<del>SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish</del>
T47	<del>SSAB report, "Styrchseprotokoll," 1943 (10 pages). Swedish</del>
* T48	<del>SSAB report, "Early Shale Retorting Trials" 1951-1952, (134 pages). Swedish</del>

RECEIVED  
AUG 01 2003  
GROUP 3600

EXAMINER: George Suchfield

DATE CONSIDERED: 10/15/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

SERIAL NO. 09/841,000

GROUP: 3672

T49	SSAB report, "Swedish Navy's Gunstrom Oil and its Use as Liquid Fuel," Thesis by E. Pals, 1949 (83 pages). Swedish
-----	-----------------------------------------------------------------------------------------------------------------------

T49	SSAB report "Behavisanalys av Ljungstroms Olja och dess Anvandning som Flytande Bränsle," Thesis by E. Pals, 1949 (83 pages). Swedish
-----	------------------------------------------------------------------------------------------------------------------------------------------

T50	<del>SSAB report, "Environmental Sulphur and Effect on Vegetation," 1951 (50 pages). Swedish.</del>
-----	-----------------------------------------------------------------------------------------------------

T51	SSAB report, "Tar Sands", Vol.135 1953 (20 pages, pages 12-15 translated). Swedish.
-----	-------------------------------------------------------------------------------------

T52	SSAB report, "Assessment of Skanes Area (Southern Sweden) Shales as Fuel Source," 1954 (34 pages). Swedish.
-----	-------------------------------------------------------------------------------------------------------------

~~T53 SSAB report, "From as Utro Dn Text Geology Reserves," 1960 (93 pages). Swedish.~~

T54	SSAB report, "Kvarntorps Environmental Area Assessment," 1981 (50 pages). Swedish.
-----	------------------------------------------------------------------------------------

**RECEIVED**  
AUG 01 2003  
GROUP 3600

George Suchfield

10/15/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.



ATTY. DKT. NO. 5659-02 TH1949

APPLICANT: de Rouffignac et al.

FILING DATE: April 24, 2001

SERIAL NO. 09/841,000

GROUP: 3672

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
G9	J19	97/01017	Jan-1997	WO			
G9	AA2	294 809	1988-12-14	EP			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

G9	G6	Roger, Rude E. "Coalbed Methane: Principles and Practice" Prentice-Hall, Inc. 1994, pp. 164-165.
G9	G9	Hyne, Norman J. Geology for Petroleum exploration, Drilling, and Production. McGraw-Hill Book company, 1984, p. 264.
G9	H2	Hobson, G.D., Modern Petroleum Technology, Halsted Press, Applied Science Publishers LTD. 1973, pp. 786, 787.
G9	L12	Van Krevelen, COAL: Typology-Physics-Chemistry-Constitution, 1993, pp. 27, 42, 52, 322, 323, 324, 325, 326, 526, 527, 726.

RECEIVED  
JUN 30 2003  
GROUP 3600

EXAMINER:

George Suchfield

DATE CONSIDERED:

10/15/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.



Part of #21

## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

### Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON  
CONTAINING FORMATION TO INCREASE A  
PERMEABILITY OF THE FORMATION

Application Number: 09/841000  
Confirmation Number: 4713  
First Named Applicant: Eric de Rouffignac  
Attorney Docket Number: 5659-02400

Art Unit: 3673

Examiner: George A Suchfield

Search string: ( 3766982 or 3599714 or 4043393 or 4093025  
or 4895206 or 00326439 or 1681523 or  
2244256 or 2714930 or 3547193 or 3562401 or  
4089374 or 4423311 or 4489782 or 4626665 or  
4694907 or 5182792 or 5402847 or 5491969 or  
5621844 or 6244338 or 6389814 or 6412559 or  
3680633 or 4508170 or 4087130 or 4537252 or  
re30019 or 2623596 or 3775185 or 4524113 or  
5284878 or 5767584 or 5955039 or 4091869 or  
4513816 or 0094813 or 5008085 or 4099567 or  
0048994 or 6485232 or 3221811 or 3987851 or  
4042026 or 4005752 or 5868202 or 5126037 or  
3477058 or 3580987 or 4193451 or 4265307 or  
4390067 or 4456065 or 4457374 or 4479541 or  
4498535 or 4598770 or 4669542 or 4682652 or  
4982786 or 5201219 or 5339904 or 3348745 or  
1646599 or 3952802 or 4010800 or 3892270 or  
3986556 or 4031956 or 4140180 or 4412585 or  
4501326 or 4524827 or 4585066 or 4776638 or  
4856587 or 5517593 or 5099918 or 5751895 or  
6015015 or 6112808 or 3026940 or 3947683 or  
3285335 or 3456721 or 20020018697 ).pn.

**RECEIVED**

JUL 01 2003

**GROUP 3600**

### US Patent Documents

Not : Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
69	1	3766982	1973-10-01	Justheim			

69	2	3599714	1971-08-17	Messman et al.
	3	4043393	1977-08-23	Fisher et al.
	4	4093025	1978-06-06	Terry
	5	4895206	1990-01-22	Price
	6	00326439	1885-09-15	McEachen
	7	1681523	1928-08-21	Downey et. al.
	8	2244256	1941-06-01	Looman
	9	2714930	1955-08-09	Carpenter
	10	3547193	1970-12-15	Gill
	11	3562401	1971-02-09	Long
	12	4089374	1978-05-16	Terry
	13	4423311	1983-12-27	Varney, Sr.
	14	4489782	1984-12-25	Perkins
	15	4626665	1986-12-02	Fort, III
	16	4694907	1987-09-22	Stahl et. al.
	17	5182792	1993-01-26	Goncalves
	18	5402847	1995-04-04	Wilson et. al.
	19	5491969	1996-02-20	Cohn et. al.
	20	5621844	1997-04-15	Bridges
	21	6244338	2001-06-12	Mones
	22	6389814	2002-05-21	Viteri et al.
	23	6412559	2002-07-02	Gunter et al.
	24	3680633	1972-08-01	Bennett
	25	4508170	1985-04-02	Littman
	26	4087130	1978-05-02	Garrett
	27	4537252	1985-08-27	Puri
	28	re30019	1979-06-05	Lindquist
	29	2623596	1952-12-30	Whorton et al.
	30	3775185	1973-11-27	Kunz et al.
	31	4524113	1985-06-18	Lesieur
	32	5284878	1994-02-08	Studer et al.
	33	5767584	1998-06-16	Gore et al.
	34	5955039	1999-09-21	Dowdy
	35	4091869	1978-05-30	Hoyer
	36	4513816	1985-04-30	Hubert
	37	0094813	1869-09-14	Dickey
69	38	5008085	1991-04-16	Bain et al.

RECEIVED

JUL 01 2003

GROUP 3600

39	4099567	1978-07-11	Terry
40	0048994	1865-07-25	Parry
41	6485232	2002-11-26	Vinegar et al.
42	3221811	1965-12-07	Prats
43	3987851	1976-10-26	Tham
44	4042026	1977-08-16	Pusch et al.
45	4005752	1977-02-01	Cha
46	5868202	1999-02-09	Hsu
47	5126037	1992-06-30	Showalter
48	3477058	1968-11-04	Vedder et al.
49	3580987	1971-05-25	Priaroggia
50	4193451	1980-03-18	Dauphine
51	4265307	1981-05-05	Elkins
52	4390067	1983-06-28	Wilman
53	4456065	1984-06-26	Heim et al.
54	4457374	1984-07-03	Hoekstra et al.
55	4479541	1984-10-30	Wang
56	4498535	1985-02-12	Bridges
57	4598770	1986-07-08	Shu et al.
58	4669542	1987-06-02	Venkatesan
59	4682652	1987-07-28	Huang et al.
60	4982786	1991-01-08	Jennings, Jr.
61	5201219	1993-04-13	Bandurski et al.
62	5339904	1994-08-23	Jennings, Jr.
63	3348745	1967-10-31	Holbert et al.
64	1646599	1927-10-25	Schaefer
65	3952802	1976-04-27	Terry
66	4010800	1977-03-08	Terry
67	3892270	1975-07-01	Lindquist
68	3986556	1976-10-19	Haynes
69	4031956	1977-06-28	Terry
70	4140180	1979-02-20	Bridges et al.
71	4412585	1983-11-01	Bouck
72	4501326	1985-02-26	Edmunds
73	4524827	1985-06-25	Bridges et al.
74	4585066	1986-04-29	Moore et al.



69	75	4776638	1988-10-11	Hahn
	76	4856587	1989-08-15	Nielson
	77	5517593	1996-05-14	Nenniger et al.
	78	5099918	1992-03-31	Bridges et al.
	79	5751895	1998-05-12	Bridges
	80	6015015	2000-01-18	Luft et al.
	81	6112808	2000-09-05	Isted
	82	3026940	1962-03-27	Spitz
	83	3947683	1976-03-30	Schultz et al.
	84	3285335	1966-11-15	Reistle
69	85	3456721	1969-07-22	Smith

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
69	1	20020018697	2002-02-14	Vinegar et al.			

## Remarks

Note: Remarks are not for responding to an office action.

This IDS is submitted as part of a Request for Continued Examination (RCE). Foreign applications and other art will be submitted on a Form PTO-1449.

## Signature

Examiner Name	Date
George Suchfield	10/15/03